

# Industrial Pretreatment Quarterly

Published for Industrial Dischargers by the King County Industrial Waste Program (KCIW)



**King County**

Wastewater Treatment Division  
**Industrial Waste Program**

Volume XXXVI Issue 2 June 2006

## Mission Statement

*The mission of the Industrial Waste Program is to protect the environment, public health, biosolids quality, and King County's regional sewerage system. We work cooperatively with our customers as we regulate industrial discharges, provide technical assistance, and monitor the regional sewerage system.*

## Industrial Waste Advisory Committee

Christopher Arfman, Skills, Inc.  
Kevin Burrell, Environmental Coalition of South Seattle (ECOSS)  
Ken Gross, GM Nameplate  
Donna Hoskins, Berlex Laboratories  
Bill Hughes, Skills, Inc.  
Larry Petersen, Mikron Industries  
Al Rainsberger, Todd Pacific  
Heather Trim, People for Puget Sound  
Doris Turner, Boeing Commercial Airplane Group - Renton  
Chris VanHoof, City of Kent  
Scott Woerman, TestAmerica

## 2005 Rewards and Recognition Program

(Awarded in 2006 and listed here throughout the year)

### Commitment-to-Compliance Award

Mastercraft Metal Finishing Inc.  
Western Pneumatic Tube  
(continued on next page)

## KCIW announces 2005 Rewards and Recognition Program winners

Each year the King County Industrial Waste Program (KCIW) recognizes significant industrial users (SIUs) of the sewer system that have helped to protect human health and the environment by maintaining an excellent record of compliance with rules and regulations for the previous calendar year.

For 2005, KCIW is honoring SIUs with Commitment-to-Compliance, Gold and Silver awards.

KCIW's Commitment-to-Compliance Award recognizes SIUs that have received a Gold Award for five consecutive years. 2005 winners are Western Pneumatic Tube and Mastercraft Metal Finishing, Inc. Having earned the award in 2000, this is Western Pneumatic Tube's second consecutive award, as companies can only attain Commitment-to-Compliance Awards once every five years.

KCIW commends the 57 Gold Award recipients that discharged wastewater during a minimum of 12 months of the calendar year from at least one of their sites and have had no violations of any kind, including discharge, permit, ordinance, reporting, self-monitoring or King County monitoring.

The 23 Silver Award winners have had no King County monitoring violations, but have had a limited number of self-monitoring violations.

Congratulations to all awardees!

For more information about the Rewards and Recognition Program go to <http://dnr.metrokc.gov/wlr/indwaste/Awards.htm> or contact KCIW (see page 3).

### Apply for KCIW's EnviroVation Award by December 15.

See page 3 contact information, or go to KCIW web site, awards page.

## Inside this Issue

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## KCIW News Briefs

### KCIW's guidelines for Biotechnology Industry

KCIW has invited all interested parties to learn about and comment on the program's intent to establish permitting guidelines for the Biotechnology Industry Sector. The purpose of these proposed guidelines is to ensure that wastewater discharges to the sanitary sewer from biotechnology facilities meet King County's local discharge limits. KCIW held a public comment session on the proposed guidelines May 3, and asked for written comment to be submitted by May 19.

For more information:

- Read an earlier article about the program's 2005 assessment of the need to develop a permitting process to assist biotechnology facilities in meeting local, state and federal discharge regulations. Available online at: [http://dnr.metrokc.gov/wlr/indwaste/PTQ\\_3\\_06.pdf](http://dnr.metrokc.gov/wlr/indwaste/PTQ_3_06.pdf) or hard copy by request (see page 1).
- Read and/or download the proposed Biotechnology Industry Sector Permitting Guidelines online at: <http://dnr.metrokc.gov/wlr/indwaste/news.htm> or hard copy by request (see page 1).
- Contact Arnaud Girard, KCIW Compliance Investigator, at 206-263-3012 or TTY Relay: 711 or e-mail: [arnaud.girard@metrokc.gov](mailto:arnaud.girard@metrokc.gov).

### Meet an IWAC member

KCIW is presenting a series of profiles of its Industrial Waste Advisory Committee (IWAC) members:



Donna Hoskins

IWAC member Donna Hoskins has been with Berlex Laboratories for four years. She is currently their environmental health and safety manager. Donna has more than 25 years experience working in the biotechnology industry. She is a Certified Hazardous Materials Manager (CHHM), Certified Professional Environmental Auditor (CPEA), Registered Medical Technologist (MT/ASCP\*) and Certified Health & Safety Specialist – OSHA\*\*.

Donna told us, "It is an honor and a privilege to serve on the Industrial Waste Advisory Committee. The meetings are informative, and the members are specialists who are willing to share their knowledge and expertise with others. IWAC presents a rare opportunity for business and government to interact for the mutual benefit of both. The King County Industrial Waste Program sets an example that other agencies would do well to follow."

\*ASCP - American Society for Clinical Pathology

\*\*OSHA - Occupational Safety & Health Administration

### Gold Award

A.O. Smith Water Products Co.  
Acu-Line Corp.  
Amgen Corp. - Bothell  
Arco Petroleum Products Co.  
Asko Processing, Inc.  
Avtech Corp.  
B.S.B. Diversified Co.  
Baker Commodities Inc.  
Ball Metal Beverage Container Corp.  
Berlex Laboratories LLC - Seattle  
Boeing Commercial Airplane - Auburn  
Boeing Commercial Airplane - North Field  
Boeing Commercial Airplane - Renton  
Boeing Electronics Center  
Burlington Environmental - Kent  
Carl Zapffe, Inc.  
Circuit Services WorldWide  
Color Tech  
Container Properties, LLC  
Crane-Eldec Corp. - Martha Lake Facility  
Dawn Food Products, Inc.  
Emerald Services, Inc.  
Exotic Metals Forming Co.  
Express Finishing  
Genie Industries - Bldg. 2 - Moosewerks Plant  
GKN Aerospace Chem-tronics Inc.  
Glacier Northwest, Inc. - Kenmore  
Hytek Finishes Co.  
Interstate Brands Corp. - Hostess  
Kenworth Truck Co. - Renton  
Magnetic and Penetrant Services Co.  
Mastercraft Metal Finishing, Inc.  
Metro Transit South Base - Component Supply Center  
Mikron Industries  
Oberto Sausage Co. - Kent  
Pacific Rendering Co., Inc.  
Philip Environmental Services Corp.  
Pioneer Industries  
Precor Inc. - Plant 1  
Precor Inc. - Plant 2  
Prototron Circuits, Inc.  
Puget Sound Energy, Inc.  
Quality Finishing Inc.  
Redhook Brewing Co.  
Rexam Beverage Can Co.  
Seattle Solid Waste - Kent Highlands Landfill  
Shasta Beverage  
Skills, Inc. - Ballard Facility  
Stockpot, Inc.  
Tri-Way Industries Inc.  
Truesoups

Universal Brass, Inc.  
Universal Manufacturing  
Universal Sheet Metal, Inc.  
Vectra Fitness Inc.  
Western Pneumatic Tube  
Western Processing Trust Fund II

### Silver Award

Aero Controls, Inc. - 20th Street NW  
Aerojet-General Corp.  
Alaskan Copper Works - 6th Ave.  
Berlex Laboratories LLC - Bothell  
Burlington Northern/Santa Fe Railway  
Cedar Grove Composting, Inc.  
Coca-Cola Bottling Co. of Washington  
Costco Wholesale  
Da Vinci Gourmet (Kerry Inc.)  
Davis Wire Corp.  
Electrofinishing, Inc.  
Genie Industries - Bldgs. 3 & 4  
GM Nameplate, Inc.  
Honeywell International Inc.  
Industrial Container Services  
King County Solid Waste - Cedar Hills  
Landfill  
Pacific Iron & Metal  
Pepsi-Cola Co.  
Skills, Inc. - Auburn Facility  
Smith Fabrication Inc.  
TTM Technologies, Inc.  
Viox Corp.  
WestFarm Foods/Darigold – Rainier

*Every year, King County recognizes significant industrial users of the sewer system that have maintained an excellent record of compliance with the county's industrial waste discharge regulations for the previous calendar year. For awards criteria and more information, go to <http://dnr.metrokc.gov/wlr/indwaste/Awards.htm>.*

*King County's industrial pretreatment regulations are designed to prevent businesses from discharging substances that can degrade the wastewater treatment process, harm workers, damage facilities or reduce surface-water quality.*

**This material is provided  
in alternative formats  
upon request by calling  
206-263-3000  
or TTY relay: 711**

## Industrial Pretreatment Tips

### Definitions of terms you may regularly encounter:

In wastewater treatment and pollution control we use terms that are occasionally unique to this field, and sometimes the meanings are not readily obvious. Understanding the correct definition could be the determining factor of whether or not a company is in full compliance with regulations. This is a continuation of a series of articles on the terms that KCIW believes are the most important, and sometimes the least understood.

### 'Publicly Owned Treatment Works' and 'Compatible Pollutants'

All of the terms addressed are in Chapter 28.82-Definitions of the King County Code, excerpted below:

**"Publicly Owned Treatment Works"** or **"POTW"** means a treatment works (which is owned in this instance by the county) as defined by Section 212 of the Act, (33 U.S.C. 1292). This definition includes any sewers that convey wastewater to the POTW treatment plant, but does not include any pipes, sewers or other conveyances not connected to a facility providing treatment. POTW shall also include any sewers that convey wastewater to the POTW from persons outside of the county who are, by contract or agreement with the county, users of the county's POTW.

**"Compatible Pollutants"** shall mean biochemical oxygen demand, suspended solids, pH, and fecal coliform bacteria, plus additional pollutants identified in a National Pollutant Discharge Elimination

*(Continued on page 6)*

### About the Industrial Pretreatment Quarterly

Published by the Industrial Waste Program, Wastewater Treatment Division, King County Department of Natural Resources and Parks.

**Editors:** Doug Hilderbrand and Dana West

**Contributors:** KCIW's Barbara Badger, Dana Heinz, Arnaud Girard, Doug Hilderbrand, Kristin Painter, Bruce Tiffany, and Dana West. Articles from other sources are attributed.

**Photos by:** Ned Ahrens, King County Graphic Design and Production Services (KCGD&PS) and Barbara Badger, KCIW

**Layout:** Doug Hammond, KCGD&PS

**Printing:** King County Graphic Design and Print Services

**Distribution:** Bibiana Ameh, Kristin Painter

**Publication is available on the Internet at:** <http://dnr.metrokc.gov/wlr/indwaste/publicat.htm>. For more information contact Doug Hilderbrand, KCIW Program Officer, at 206-263-3032 or TTY Relay: 711, or e-mail: [douglas.hilderbrand@metrokc.gov](mailto:douglas.hilderbrand@metrokc.gov).

#### Contact information:

King County Industrial Waste Program (KCIW), 130 Nickerson St., STE 200,  
Seattle WA 98109-1658. PH: 206-263-3000 or TTY: 711.  
<http://dnr.metrokc.gov/wlr/indwaste>

## Industrial Pretreatment Tips

### BNA Sampling Update

*KCIW presents these technical assistance tips as cost-effective ways to reduce pollutants and volumes of wastewater discharged into the sewerage system, to protect public health and the environment.*

Prior to 2005, KCIW collected the majority of Base-Neutral-Acid (BNA) compliance and non-compliance samples using vinyl flexible tubing and Nalgene carboys. Quality control data and compliance data collected at industries indicated that the vinyl flexible hoses most often used by KCIW can leach measurable amounts of some BNA compounds, specifically bis(2-ethylhexyl)phthalate (BEHP), into the extracted samples. Phthalates are generally used as plasticizers designed to increase the flexibility of a variety of products including sample tubing and carboys. In turn, these compounds may leach out into field samples, producing contaminants not normally found at some industrial sites.

The program has since researched and tested different types of tubing to assess which type would eliminate or significantly reduce the levels of phthalates into the samples. The results indicated the best type of tubing to use for collecting BNA samples is the Chemfluor FEP (fluorinated ethylene-propylene) Teflon tubing. This tubing is virtually inert to all chemicals and solvents and contains no plasticizers. According to the program's compliance specialist team, one downside to using the tubing is that it is very stiff and hard for the specialists to manipulate at sample sites.

Currently, the KCIW compliance specialists are using the Chemfluor FEP Teflon tubing and glass carboys for sample collection requiring BNA analysis. The program has written and implemented a revised standard operating procedure for BNA sample collection.

*For further information contact Dana Heinz, KCIW Compliance Specialist, at 206-263-3005 or TTY Relay: 711 or e-mail: [dana.heinz@metrokc.gov](mailto:dana.heinz@metrokc.gov).*

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## Industrial Pretreatment Tips

### KCIW revises screening levels for discharges of wastewaters containing organic compounds

*KCIW presents these technical assistance tips as cost-effective ways to reduce pollutants and volumes of wastewater discharged into the sewerage system, to protect public health and the environment.*

The King County local discharge limit for organic compounds prohibits the discharge of any organic pollutant that results in the presence of toxic gases, vapors, or fumes within a public or private sewer or treatment works in a quantity that may cause worker health and safety problems. Most frequently, the highest concentrations of organic compounds are found in the discharges from groundwater remediation facilities, waste treatment facilities and in landfill leachate.

Following recent U.S. Environmental Protection Agency guidance, KCIW has revised the discharge screening levels for several organic compounds. These screening levels will be implemented immediately for all new or revised permits or discharge authorizations. For existing permits or discharge authorizations, the screening levels written in the permit or discharge authorization will apply until the renewal date.

The following is a comparison of the new and old screening levels for some common organic compounds:

Organic Compound	New Screening Level (mg/L)	Old Screening Level (mg/l)
Benzene	0.070	0.130
Ethyl benzene	1.7	1.4
Tetrachloroethylene (PCE)	0.24	0.36
Toluene	1.4	1.5
Trichloroethylene (TCE)	0.5	0.5

*With questions or to receive a complete list of the new screening levels, please contact Bruce Tiffany, KCIW Water Quality Engineer, at 206-263-3011 or TTY Relay: 711 or e-mail: [bruce.tiffany@metrokc.gov](mailto:bruce.tiffany@metrokc.gov).*



# Ecology's TREE Program helps save money, reduce waste

*This article was submitted by Michelle Costenaro of the Washington State Department of Ecology (Ecology) TREE program staff.*

Are you interested in saving money by decreasing your waste streams? Would you like to reduce resource use and the cost of waste management? Ecology offers free, non-regulatory, confidential technical expertise to industrial facilities within the state. A team of engineers and other experts can visit your facility to provide another set of eyes to help you identify areas for potential improvement, and then perform a cost analysis to help you evaluate these options. You will not be required to implement any of the suggestions, but their savings will probably make you choose to!

The team's mission is to reduce environmental impacts by providing free engineering assistance to companies with minimal access to in-house pollution prevention expertise. The team is called Technical Resources for Engineering Efficiency (TREE) and is funded and staffed by Ecology technical assistance programs. The team identifies opportunities that can reduce your environmental risk, while saving you money. TREE typically focuses on:

- Water use
- Wastewater generation and treatment
- Solid waste generation
- Hazardous material use and waste generation

## Previous Success

In 2005, TREE's suggestions for three facilities could annually:

- Reduce water use by 40.4 million gallons
- Reduce 108 tons of solid waste generation
- Reduce wastewater generation by 3.3 million gallons
- Save a total of \$67,000

## Next Steps

Contact Lynn Coleman or Michelle Costenaro, team co-leads, for more information. They can tell you more about the team. If you want to pursue a project, you can set up a time for a couple team members to visit your facility. During this visit the team will talk with you about what areas you would

like to look at and what kind of payback you look for, and take a brief walk through the facility to decide whether you would like to pursue the project. If not, the team can send you some general recommendations from the initial visit. Projects vary, but typically involve three to six visits over the course of several months, with a summary report at the conclusion of the project.

## Contact Information:

- Lynn Coleman, P.E.: 360-407-6738 or lcol461@ecy.wa.gov.
- Michelle Costenaro: 425-649-7143 or mcos461@ecy.wa.gov.

<http://www.ecy.wa.gov/programs/hwtr/TREE>

## May 3 IWAC meeting highlights

*With the goal of protecting the environment, public health, biosolids quality and King County's regional sewerage system, KCIW's Industrial Waste Advisory Committee (IWAC) meets to exchange ideas among representatives of industrial wastewater dischargers, sewer agencies, environmental groups, and KCIW staff.*

**Announcements:** Sandy Hallberg will be retiring from Asko Processing this summer. This will be the last IWAC meeting he will attend. Congratulations and thanks to Sandy for his service on the Industrial Waste Advisory Committee since June 2002.

### EPA Pretreatment Streamlining Rules:

Members of the KCIW staff gave an overview of the required and optional changes in the new EPA Pretreatment Streamlining Rules. For more information, contact KCIW Acting Program Manager Denise Healy at 206-263-3004 or e-mail: [denise.healy@metrokc.gov](mailto:denise.healy@metrokc.gov). To read a special insert in the Industrial Pretreatment Quarterly, Volume XXXIV, Issue 4, Dec. 2005 - Jan. 2006 go to: [http://dnr.metrokc.gov/wlr/indwaste/PTQ\\_12\\_05\\_06.pdf](http://dnr.metrokc.gov/wlr/indwaste/PTQ_12_05_06.pdf) or to request hard copy see page 3.

*The next regular meeting will be held November 1. Agenda and meeting location to be an-*

*(Continued on page 6)*

(IWAC meeting continued from page 5)

nounced. The meeting site at 130 Nickerson St. is wheelchair accessible. People who have needs or disabilities for which arrangements must be made in advance should contact KCIW Administrator Kristin Painter at 206-263-3000 or TTY Relay: 711, or e-mail: kristin.painter@metrokc.gov.

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(Pretreatment Tips continued from page 3)

System (NPDES) permit if the POTW is designed to treat such pollutants, and in fact does remove such pollutants to a substantial degree. The term “substantial degree” is not subject to precise definition, but generally refers to removals in the order of 80 percent or greater. Examples of the additional pollutants that may be considered compatible with the treatment plant’s design include: chemical oxygen demand, total organic carbon, phosphorus and phosphorus compounds, nitrogen and nitrogen compounds, and, fats, oils and greases of animal or vegetable origin except as prohibited where these materials would interfere with the operation of the POTW.

King County’s sewage treatment facilities are designed to treat “compatible pollutants” as defined above. The definition notes that animal/vegetable fats, oils, and grease (FOG) may be prohibited to prevent interference. That is the case in the King County area.

KCIW regulates animal/vegetable FOG (also called Polar FOG) using a narrative limit instead of a numerical limit. Under this narrative limit polar FOG dischargers are required to minimize free-floating polar FOG.

Dischargers may not add emulsifying agents exclusively for the purposes of emulsifying free floating FOG. In addition these companies are required to complete a FOG control plan.\*

Petroleum FOG (also called non-polar FOG) is not considered a compatible pollutant. It is regulated by a numerical limit of 100 mg/l.

For additional information about FOG control plans go to: <http://dnr.metrokc.gov/wlr/indwaste/fog.htm>.

## ‘Combined Sewer’ and ‘Storm Drain’

- **“Combined Sewer” or “Combined Sewer System”** shall mean a conduit or system of conduits in which both wastewater and storm water are transported.

- **“Storm Drain”** shall mean a conduit designed or used to transport storm water.

Understanding the difference between the two terms defined above, and what type of line(s) serve your facility, could mean the difference between being in compliance and being in a lot of hot water!

Some cities have areas where both combined sewers and storm drains co-exist, perhaps within a block of each other. As an example, there are areas in Seattle where one side of the block is served by a combined sewer and the other by separated storm and sanitary sewers. It is important to understand the distinction and to know what type of sewer and/or drainage system serves your property.

How do you determine what kind of sewer/drainage system service you have? Contact your local water and/or sewer utility - they are the agencies that issue permits for sewer/water connections. These agencies are usually the ones you pay for water and sewer services. These agencies usually maintain drawings, which in Seattle are called side sewer cards, that show all of the local sewers. They identify the type of sewers and show where they are connected to buildings.

Combined sewers are designed and sized to accept both sanitary sewage and storm run-off, while storm drains are designed to accept only uncontaminated storm water. Areas with separate storm sewers normally are also served by separate sanitary sewers.

Complicating this picture is the issue of contaminated industrial storm water (CISW). CISW is water that has been contaminated either by some type of industrial activity or has come into contact with contaminated land.

Generally, CISW is prohibited from discharge into storm drains. Some jurisdictions also prohibit it from discharging into separated sanitary sewers. There may also be volume limitations, depending on the size of the pipes for the local sewers.

In our King County, commercial/industrial dis-

chargers wishing to discharge CISW must get authorization from both KCIW and the local sewer agency.

Which agencies do King County companies contact concerning storm sewers or combined sewers? The contact agency may vary from city to city, depending on locale and jurisdiction. For instance Seattle Public Utilities operates the storm drains and the local sanitary sewers in Seattle, while King

County's Department of Natural Resources operates the trunk sewers and treatment plants. If you need assistance in determining who to contact, use KCIW's contact information, page 1.

*For more information about these and other terms, contact Doug Hilderbrand, KCIW, at 206-263-3032 or TTY relay: 711 or e-mail: douglas.hilderbrand@metrokc.gov.*

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## Publication of recent enforcement actions

King County's Industrial Waste Program is responsible for making sure that water used by county industries returns to our waterways clean and safe. This protects our water resources, our public health, workers at treatment plants and the biosolids produced there.

Most businesses in King County do an excellent job of meeting this clean water goal by treating their industrial wastewater before they discharge it to the sewer. Whenever possible, we work to provide technical assistance and help industries reach compliance before enforcement actions become necessary. If companies violate clean water standards, however, we do take enforcement actions, as federal regulations require.

The following companies are users of the county sewer system that violated treatment requirements between March and May 2006, or have not had their violations previously published. They were found in significant noncompliance during the reporting period, received fines, had violations that were unique or warranted special attention or met a combination of those actions.

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### Puget Sound Recycling

523 A St. S.E.  
Auburn, Washington 98002

**Nature of Violation/ Type of Pollutant:** Discharge violations-Bis(2-ethylhexyl)phthalate, copper, lead, nickel, n-Octadecane, non-polar FOG, and zinc.

**Basis for Publication:** Puget Sound Recycling exceeded the chronic criteria, that is, during a six-month period at least 66 percent or more of the measurements for non-polar FOG exceeded (by any magnitude) the daily maximum limit.

**Comments:** Puget Sound Recycling will be required to monitor all effluents for fats, oils, and grease prior to discharge to the sewer and they will be increasing the frequency of their self-monitoring for the next nine months.

**Penalty:** \$2,300 fine and \$2,935 post-violation charge and compliance order.

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### Puget Sound Recycling

523 A St. S.E.  
Auburn, Washington 98002

**Nature of Violation/ Type of Pollutant:** Failure to file an engineering review and update their operations and maintenance manual.

**Basis for Publication:** Significant noncompliance for failure to file the two reports within 45 days of the due date.

**Comments:** Puget Sound Recycling filed the two reports, no further action required.

**Penalty:** Final Notice to file the reports and notice of significant noncompliance.

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**Other Enforcement Actions:** King County Industrial Waste also acted on two other violations at one company for the following parameter: late reports (2).

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We all need to work together to prevent pollution. If you have information for the Industrial Waste Program or questions about our programs, please call 206-263-3032 or 711, TTY Relay Service. You may also visit our program's pages at <http://metrokc.gov/wlr/indwaste.htm>.



Wastewater Treatment Division  
**Industrial Waste Program**  
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Seattle, WA 98109-1658

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## Local sewer agency workshop at West Point Treatment Plant

*King County's Wastewater Treatment Division protects public health and water quality by serving 17 cities, 17 sewer districts and more than 1.4 million residents in King, Snohomish and Pierce counties. The regional public utility has been preventing water pollution for 40 years.*



*KCIW held a workshop for local sewer agencies on April 26. Speakers included Bert Guenther, Wastewater Operations Supervisor, (shown speaking on right) and Tom Cash, Source Control Technician, both from City of Redmond, who talked about the PREFOG group and restaurant fats, oils and grease (FOG). The workshop was held at West Point Treatment Plant, which is celebrating its 40<sup>th</sup> anniversary this year.*

## Creating Resources from Wastewater